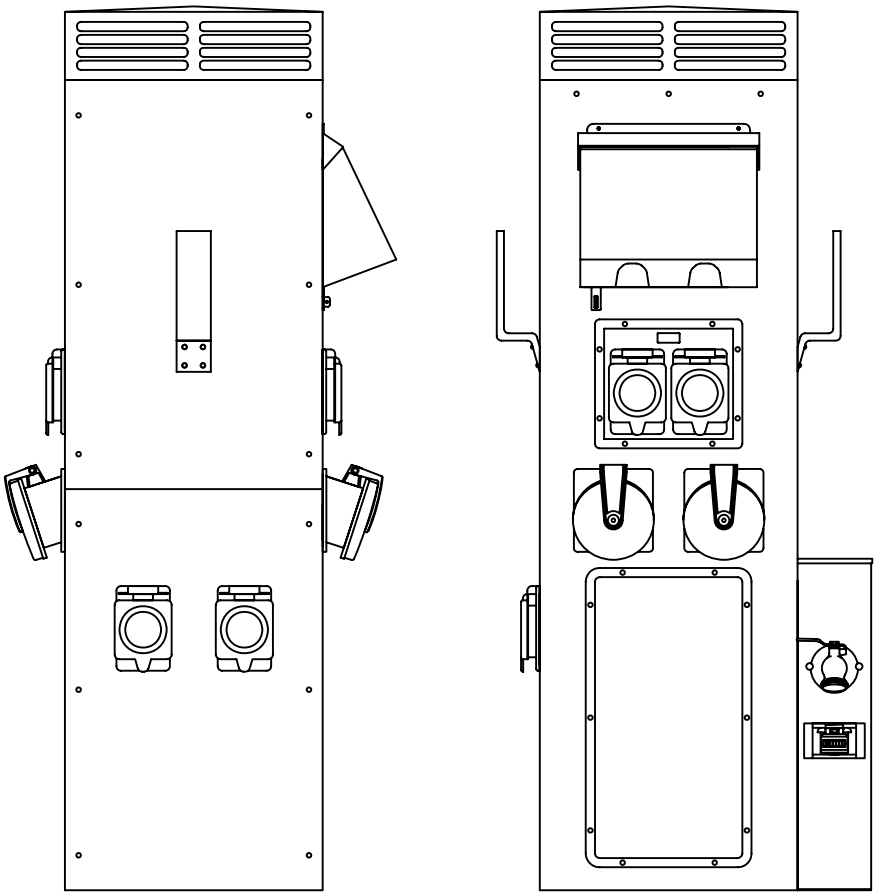
GENERAL SPECIFICATION
ADMIRAL-SS



Marina Power and Lighting, Inc.
General Specifications for the Admiral SS – 14 Inch – Power Pedestal

All Power Pedestals Must Meet the Following:

Part I. General:

1.1 General Requirements-

A.) Shall be tested and certified to be in compliance with ANSI/UL 231 entitled "power outlets."

B.) If a laboratory other than U.L. is used that laboratory must certify, in writing, that the power outlet has been tested and meets all of the requirements of ANSI/UL 231, ***including 746C polymeric materials, and that the unit will pass the 94VO-5V flame test.***

C.) Shall be certified to meet all sections of NFPA 303 DTD "2006 Marinas and Boatyards."

D.) Shall meet 406.8 (B)(2)(a) of the national electric code NFPA 70, i.e. "A receptacle installed in a wet location shall be installed in a weatherproof enclosure, the integrity of which is not affected when the attachment plug cap is inserted."

E.) The receptacles shall be mounted at a down angle of 35 degrees or greater from vertical to relieve the strain of the cable weight on the receptacle locking mechanism.

Part II. Products:

2.1 Acceptable Manufacturers - Power Pedestals/Lighthouse SS Enclosures-

A.) Marina Power and Lighting, Inc.
149 Warwick Court, Williamsburg, VA 23185.
Toll Free: 1-800-723-8009

2.2 Power Pedestals/Lighthouse SS Enclosures – General-

A.) Main Housing:

1. The housing shall be constructed of 18 gauge stainless steel and shall be coated with a UV-resistant polyurethane over a powder coating. It shall be UL listed as a type 3R weatherproof enclosure.

B.) Lighting Assembly / Housing:

1. The lighting top housing shall be constructed of 18 gauge stainless steel and shall be coated with a UV-resistant polyurethane over a powder coating. It shall be UL listed as a type 3R weatherproof enclosure.

C.) Wiring:

1. The power pedestal shall be completely pre-wired at the factory to the load side of the compression lug assembly.
2. All load copper wiring shall be of high stranding and tin plated to resist corrosion.
3. The maximum size of the line wiring shall be 350 MCM or 250 Amps.

D. Loop Feed Buss Bar System:

1. The buss system shall be of stud compression terminal type using a 3/8" – 16 silicon-bronze stud with a silicon-bronze Belleville type washer. The 3/8" – 16 silicon-bronze hex-nut shall be torqued to 200 inch-pounds.
2. Two separate access areas shall be provided with individual access panels. There shall be one access area for each electrical phase – one for the 240V, single phase supply, and one for the 208V, three phase supply. These access areas shall be separated by a phase isolation plate.

E.) Grounding:

1. All exposed metallic parts must have an integral ground that is a part of the equipment grounding system.

F.) Receptacles:

1. All receptacles shall be of the corrosion resistant type conforming to NEMA L - 5 and/or NEMA L - 6 requirements and are rated for marine use. 100 Amp receptacles should conform to IEC and CEE standards.
2. All 50 amp receptacles shall be mounted at an angle that is a minimum 35 degrees from vertical and located behind a lockable weatherproof, hinged door that remains closed when the receptacle is or is not in use.
3. All receptacles shall be mounted at least 30" above the dock.

G.) Circuit Breakers:

1. All breakers for receptacles shall be of the thermal magnetic type, 10,000 A.I.C., and shall be UL listed.
2. Circuit breakers for the 50 amp receptacles shall be covered with the same lockable door that covers the receptacles.
3. Circuit breakers for the 100 amp receptacles shall be covered with individual Lexan (polycarbonate) weather protective covers.

2.3 Power Pedestals-

A.) Hose/Cable Bracket:

1. Each pedestal shall have brackets capable of holding a 50' length of 5/8" water hose or 50' of 50 amp 4 conductor boat S.O. cord.

B.) Receptacles:

1. Receptacles for boat users shall be a locking and grounding type, two (2) single phase, 125/250 volt 50 amps, two (2) single phase, 120/240 volt 100 amps, and two (2) three phase 120/208V 100 amp as outlined in the Pedestal Schedule, which is a part of this specification.

C.) Lighting:

1. Each pedestal shall be equipped with a non-metered light. The lighting assembly shall include two 13 watt fluorescent biaxial lights, which are protected by a 20 amp, single pole breaker.

D.) Circuit Breakers:

1. Circuit breakers for 50 amp receptacles shall be a two pole 125/250 volt, 50 amp thermo-magnetic type.

2. Circuit breakers for the 120/240V, 100 amp pin and sleeve receptacles shall be a two pole 120/240 volt, 100 amp thermo-magnetic type.
3. Circuit breakers for the 120/208V, 100 amp pin and sleeve receptacles shall be a three pole 120/208 volt, 100 amp thermo-magnetic type.

E.) Metering:

1. The pedestals shall be equipped with fully electronic meters that display the kilowatts used at each slip on a non-resettable digital counter that is protected from the weather. The accuracy of the meters must be certified by the manufacturer to have a 200 ampere rating and no more than a 2% error when tested in accordance with ANSI.-C12.1.(California requires 1%).

F.) RJ45 and Cable TV:

1. Each pedestal shall be equipped with two outlets for each slip. Each outlet shall contain one RJ45 receptacle and one male cable TV connector under a Lexan (polycarbonate) weather protective cover.
2. Each CATV / RJ45 assembly shall include an internal gangbox with flexible PVC for high / low voltage isolation.

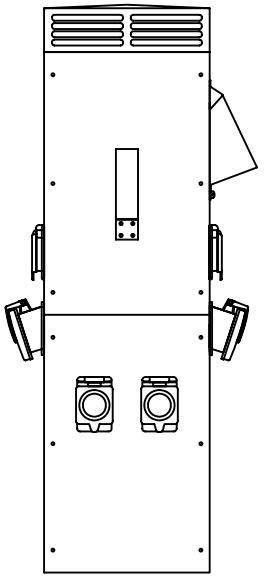
G.) Water:

1. Each pedestal shall be equipped with two 1/2" ball valves with each having a single 1/2" female NPT fitting. The water assembly shall be equipped with one water meter, which monitors both ball valves.
2. The water assembly shall have an isolation box, which separates the water connections from the electrical access area.

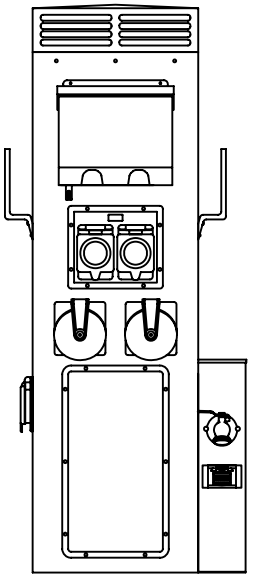
H.) Power Pedestals for A.D.A. Slips (Designated as Handicap Accessible):

1. Power pedestals installed on designated handicap accessible slips shall comply with the guidelines of the Americans With Disabilities Act of 1990.

FRONT



SIDE 1



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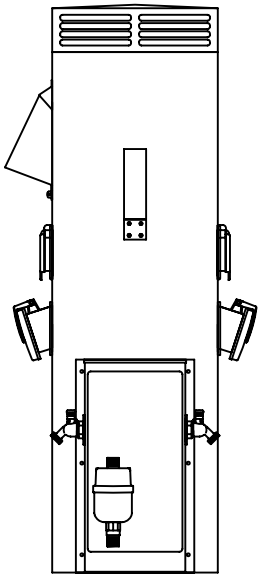

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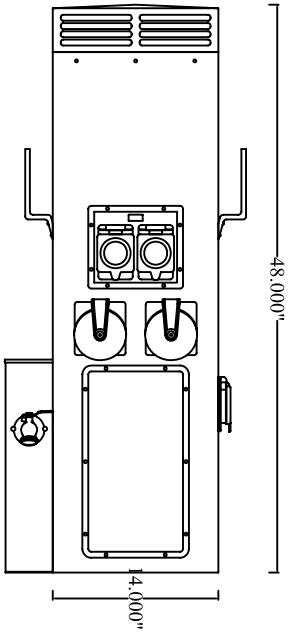
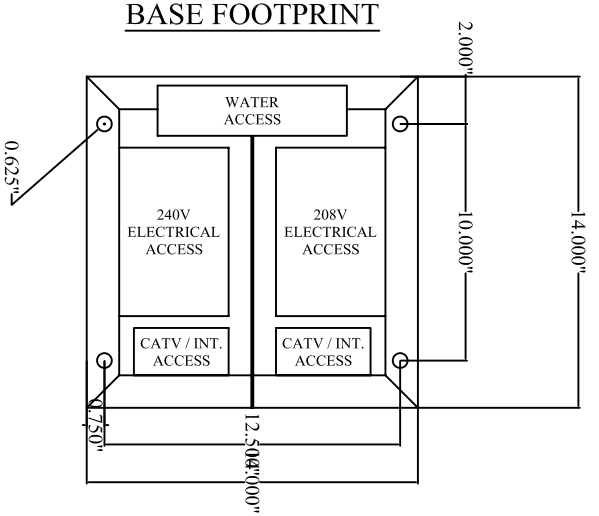
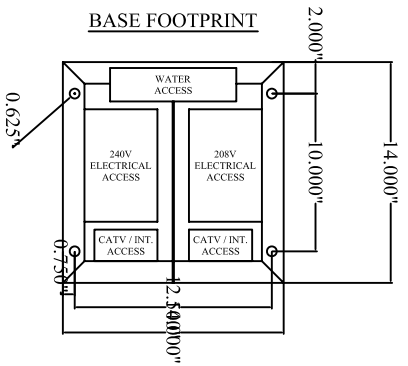


BASE FOOTPRINT



1	LIGHTING ASSEMBLY WITH DUAL 13 WATT FLUORESCENT BULBS
2	HOSE / CABLE BRACKETS (2)
3	CATV / RJ45 CONNECTIONS (2 EA.)
4	CATV / RJ45 GANGBOX ACCESS
5	50A, 240V RECEPTACLES AND 2 POLE BREAKERS (2 EA.)
6	ELECTRONIC METERS WITH COUNTERS (1 PER PHASE)
7	100A, 2 POLE, 240V BREAKERS (2)
8	100A, 240V RECEPTACLES (2)
9	240V BUSS BAR ACCESS PANEL
10	DUAL WATER ASSEMBLY WITH ONE WATER METER
11	100A, 3 POLE, 208V BREAKERS (2)
12	100A, 208V RECEPTACLES (2)
13	208V BUSS BAR ACCESS PANEL
14	PHASE ISOLATION PLATE
15	THREE PHASE, 208V BUSS BAR
16	SINGLE PHASE, 240V BUSS BAR
17	WATER ISOLATION BOX
18	RECESSED WATER ACCESS AREA
19	CATV / RJ45 GANGBOX WITH FLEXIBLE PVC

BASE FOOTPRINT



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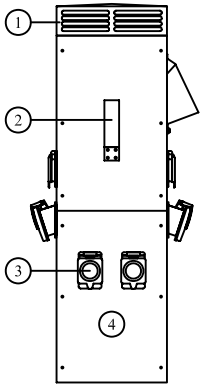
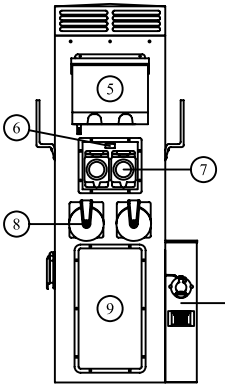


240V SIDE



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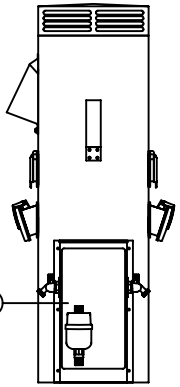
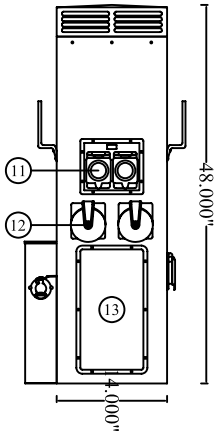


208V SIDE



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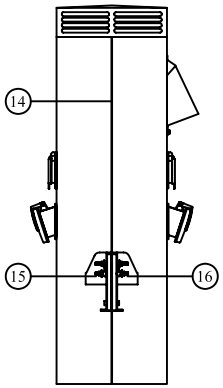
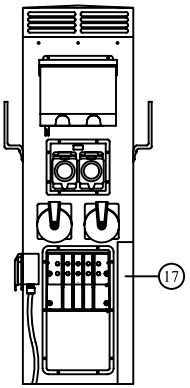


240V SIDE



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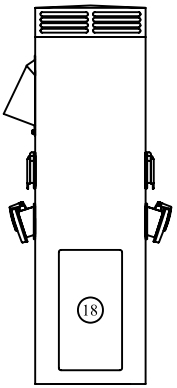

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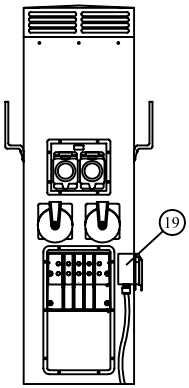

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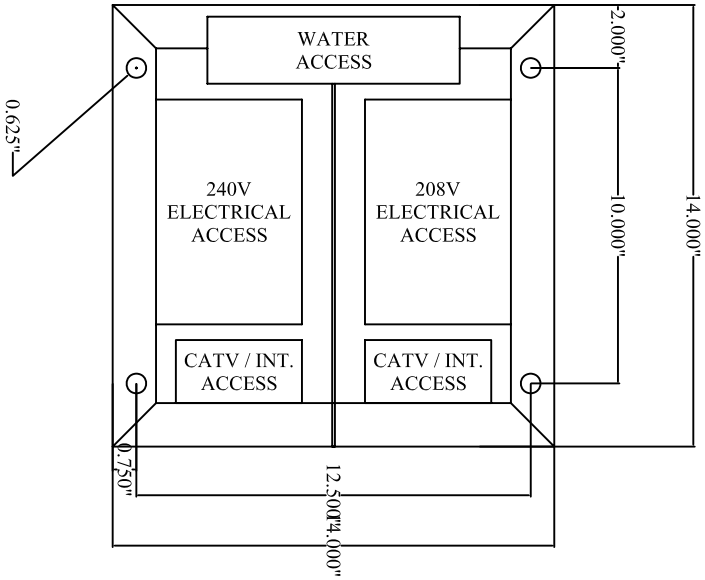
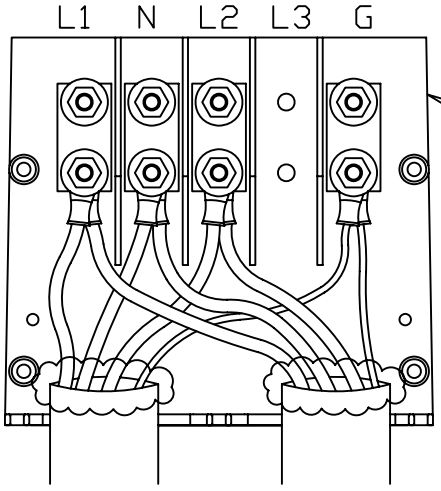
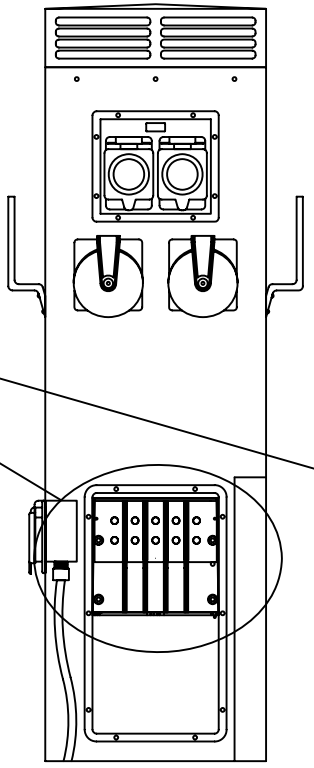


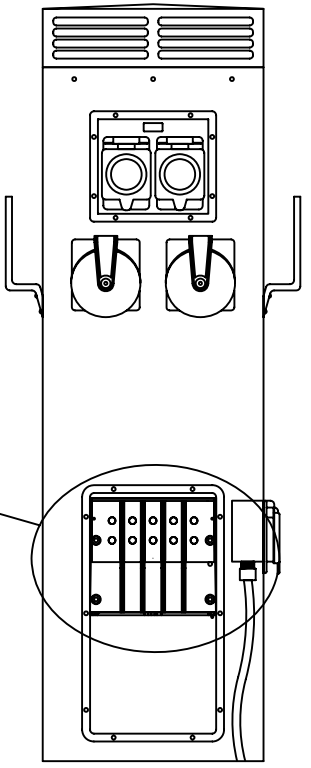
COMPRESSION TERMINALS:
CONTRACTOR NEEDS TO CRIMP TERMIANLS TO LINE WIRES AND PLACE ON PROVIDED STUD LUG CONNECTOR.

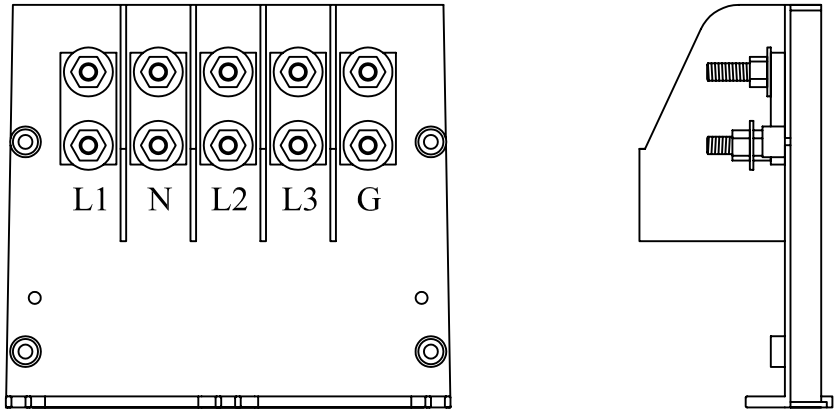


240V SIDE

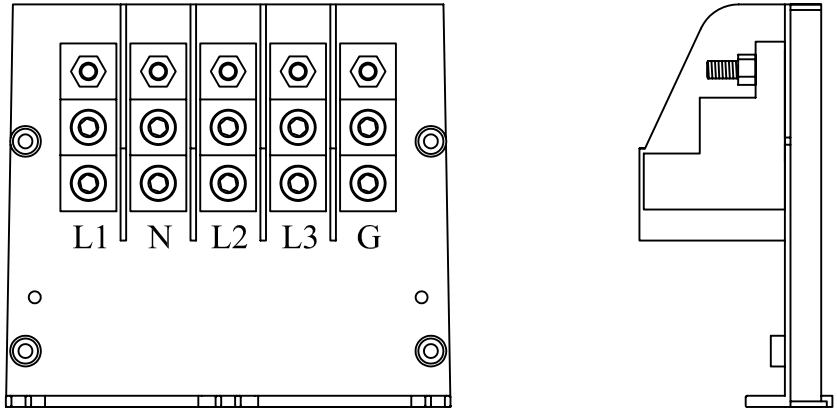


208V SIDE

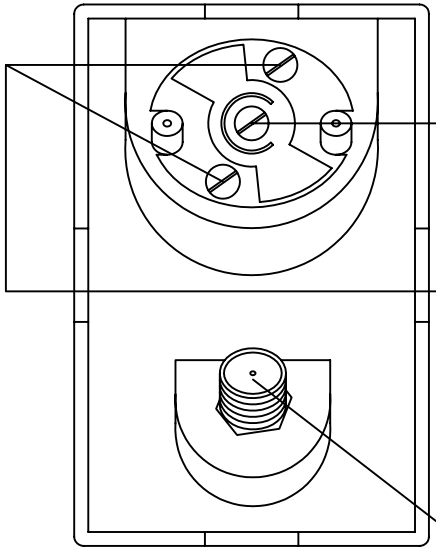




STANDARD LOOP FEED
BUSS BAR ASSEMBLY
SINGLE PHASE OR THREE PHASE



MECHANICAL LUG
BUSS BAR ASSEMBLY
SINGLE PHASE OR THREE PHASE

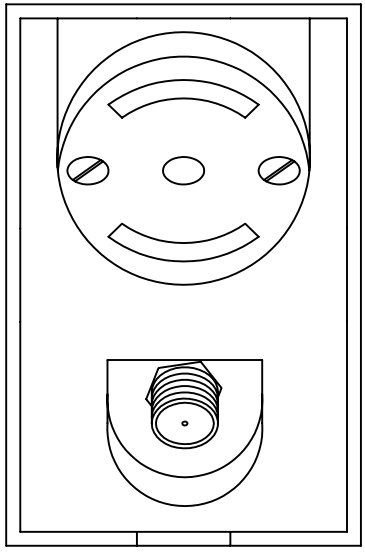


INTERNAL

CONNECT TO LH BUS BAR GROUND USING #14 WIRE.

CONNECT USING REGULAR PHONE WIRE.

CONNECT USING REGULAR COAX CABLE.



EXTERNAL

PHONE

CABLE TV

Admiral-SS Installation

We strongly recommend that a qualified electrical contractor install this unit

The main housing access panel must be removed to install the pedestal and to access all service connections. This panel is the back cover of the pedestal and runs the entire length of the housing. To take it off, remove all screws that hold it in place. With the access panel removed, the following can be accomplished:

1. Installing the Pedestal - See the attached dimensional drawing of the Admiral mounting base template. Suggested locations for the power lines as well as water, phone and cable TV utilities are identified. However, the entire area inside of the mounting plate is open (14"x 14").

- Secure the base to the dock with a bolt or lag screw through each of the four 5/8" holes. The four holes in the base can be used as a drill guide template or as a template guide for casting studs in concrete.
- Tighten the four 1/2" nuts securely on the studs.

2. Connecting Power to the Pedestal Bus Bars:

- The loop feed 3/8" compression style stud lug bus bars are located in clear view in the center of the pedestal on each side of the unit. An electrician will need to crimp wire terminations on power lines and attach the leads as directed by the wiring diagram instructions located below the bus bars.

3. Water Connection:

- Remove the water access panel (below bus bars and behind the water faucets) from the inside of the pedestal to expose the backside of the faucet(s) 3/4" female fitting. We recommend attaching a flexible stainless or black-poly hose from your water line. Connect the water line(s) and replace the water access panel.

4. Phone and Cable TV Connection

- To access the backside of the phone and cable TV remove the four screws that hold the receptacle cover in place. Feed the phone line and cable through the bottom of the inside cover and out through the housing. Connect them to the backside of the receptacles. Guide the wires back into the housing and reinstall the cover.

5. 13-watt Fluorescent Light:

- The Lighthouse pedestal is shipped with the 13-watt bulb out of the socket, to prevent breakage during shipment, and it is in a box taped inside of the top section of the pedestal. To access the bulb and socket, remove the four screws at the bottom of the unit and lift the top off. Remove the bulb from the box and snap it into the socket in the top. Discard the box. Put the top, back in position and replace the four screws into the bottom of the lens.
- Repeat this process to replace the bulb when necessary.

Reinstall the main access panel to finish installation

Limited Lifetime Warranty - Pedestals

Marina Power and Lighting, Inc. warrants to the end user, the customer (you), that the utility pedestal, Lexan® casing, and lens will be free from defects in materials and workmanship for the life of the product. If breakage occurs during this period the broken part shall be replaced at no charge.

There is a full 2-year warranty on all receptacles and breakers for defects in material and workmanship in normal use.

The limited warranty covers only those defects that arise in the normal use of the product.

This limited warranty does not apply to any product that has been damaged, altered, subjected to abuse or misuse, or acts of God.

Light bulbs, photocells, and ballasts transformers are warranted for one year against manufacturer defects in material and workmanship.

Meters are warranted for the life of the product and will be exchanged for a new or repaired meter during this period. Voltage surges above 140 volts/line and reverse polarity failure are not covered and will be repaired for US$10.00 plus shipping costs.

Marina Power and Lighting will not accept back charges for any work performed by an outside contractor that has not been previously authorized in writing by Marina Power and Lighting.